Preliminary Notes on the Biology of *Scymnus nubilus* Mulst., a Predatory Beetle on Aphids in Punjab

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Scymnus nubilus Mulst. (Coccinellidae: Coleoptera) a small roundish (1.93 mm. x 1.24 mm.) brown beetle was commonly observed feeding on corn aphid *Rhopalosiphum maidis* Fitch infesting maize (*Zea mays* L.) tassels during July-October 1972 and April-May 1973. In size it showed close resemblance to *Scymnus gracilis* (1.93 mm. x 1.21 mm.) a black predatory coccinelid feeding on mites. *S. nubilus* was more specific predator of aphids. Its role as a predator of aphids has been normally neglected because of its small size. Its predatory habits have been cursorally mentioned by Narayanan *et al.* (1967) and Sandhu *et al.* (1973) but no work has been done on its biology. Preliminary observations on its biology are being reported in this note.

Neonate small woolly, white, active larvae were collected (n=26) and brought to the laboratory during August 1972 from the field deposited egg mass. They were reared singly in small Petridishes (5 cm.) and aphids on small pieces of maize tassel were supplied daily. The larvae had cottony-white fluffy scales on the body and conspicuous, sharp curved mandibles. Larvae were full grown in 10-14 days (n=8) and attained 2 mm. length. Pupation lasted for 7-8 days (n=7). The newly emerged dirty white beetles rested for sometime after emergence and the final brown colour developed slowly. The adults survived for more than 10 weeks with or without food and the observations were later discontinued (n=20). It was also reared on *Aphis gossypii* Glov. from cotton. Adults were collected throughout the year but peak-period of activity was from July to October. Beetles normally rested in the whorl of maize plant.

Longevity of adults as observed in the present studies must be of advantage for the survival of the species even with scarcity of food. It can be advantageously utilised for mass release in biological control operations.

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